

202  
10.7

p 572

8-13, 17, 18, 22-24, 27

8.

$$2x = 4 \cdot 5$$

$$x = 10$$

9.

$$6 \cdot 6 = 9x$$

$$4 = x$$

10.

$$3x = 7 \cdot 2$$

$$x = 4.7$$

11.  $x(x+8) = 5 \cdot 4$

$$x^2 + 8x = 20$$

$$x^2 + 8x - 20 = 0$$

$$(x-2)(x+10) = 0$$

$$2$$

12.

$$x^2 = 12 \cdot 3$$

$$x^2 = 36$$

$$x = \pm 6$$

$$6$$

13.  $4^2 = 2(x+2)$

$$16 = 2(x+2)$$

$$8 = x+2$$

$$6 = x$$

17.  $x(x+5) = 3(12)$

$$x^2 + 5x = 36$$

$$x^2 + 5x - 36 = 0$$

$$(x+9)(x-4) = 0$$

$$-4$$

18.  $x(2x+5) = 5(x+10)$

$$2x^2 + 5x = 5x + 50$$

$$2x^2 = 50$$

$$x^2 = 25$$

$$x = \pm 5$$

$$5$$

22.  $4 \cdot 4 = (x+8)(8-x)$

$$36 = 8x - x^2 + 64 - 8x$$

$$x^2 = 28$$

$$x = 2\sqrt{7}$$

23.  $2 \cdot 8 = y^2$

$$16 = y^2$$

$$\pm 4 = y$$

$$4$$

24.  $12^2 = 6(y+9)$

$$24 = y+9$$

$$15 = y$$

$$2x = 3(15)$$

$$x = 22.5$$

27.

$$3(x+3) = 4(13)$$

$$3(x+3) = 52$$

$$x+3 = 17.3$$

$$x = 14.3$$